## SUBSTITUTE SPECIFICATION .

F-7999

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Ser. No. 10/681,997

## ABSTRACT

The slope detecting device includes means for detecting a horizontal acceleration of the vehicle; means for detecting perpendicular acceleration to the running direction of the horizontal detecting means; and means for detecting, relatively to the horizontal detecting means and perpendicular detecting means, the acceleration-deceleration of the moving object by whether the sum of squares respectively which the acceleration detected by the horizontal detecting means and the acceleration detected by the perpendicular detecting means is equal to the second power of gravity acceleration, and calculating the slope of the vehicle in acceleration-deceleration so that it can detect the slope of vehicle in acceleration-deceleration as well as during running the vehicles at a constant speed.

## MARKED SPECIFICATION

F-7999

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## **ABSTRACT**

The slope detecting device includes means for detecting a horizontal acceleration of the vehicle; means for detecting perpendicular acceleration to the running direction of the horizontal detecting means; and means for detecting, attaching relatively to the horizontal detecting means and perpendicular detecting means, detecting the acceleration-deceleration of the moving object by whether the sum of squares respectively which the acceleration detected by the horizontal detecting means and the acceleration detected by the perpendicular detecting means is equal to the second power of gravity acceleration, and calculating the slope of the vehicle in acceleration-deceleration so that it can detect the slope of vehicle in acceleration-deceleration as well as during running the vehicles at a constant speed.